#### MINUTES OF THE FLOOD CONTROL ADVISORY BOARD

February 23, 2000

The regular monthly meeting of the Flood Control Advisory Board was called to order by Acting Chair Patel at 2:05 p.m. on Wednesday, February 23, 2000.

**Board Members Present:** Melvin Martin, Chair; Shirley Long, Secretary; Hemant Patel; Mike Saager; Paul Cherrington, Ex Officio; Dan Matthews, Ex Officio (for Tom Callow).

**Board Members Absent:** Gilbert Rogers, Vice Chair; Tom Callow, Ex Officio.

<u>Staff Members Present</u>: Mike Ellegood, Chief Engineer & General Manager; Julie Lemmon, General Counsel; Tom Johnson, Deputy Chief Engineer/Division Manager; Dick Perreault, CIP/Policy Branch Manager; Scott Vogel, Project Manager; Bobbie Ohler, Project Manager; Afshin Ahouraiyan, Project Manager; Dave Johnson, Regulatory Division Manager; Joe Munoz, Public Information Officer; Raj Shah, Project Manager; Mike Alexander, Planner Management Analyst; Kathy Smith, Clerk of the FCAB; Kelly Presson, CIP Coordinator.

Guests Present: Charles Blackwell; Liz Clendenin; Deanna Coffman; Jane Cole; George G.B. Dopp; Orland Freeman; JoAnn Freeman; Gary W. LaForge, City of Chandler; Paul A. Manera, Town of Paradise Valley; Irene Mayer; Bill Mead, Town of Paradise Valley; Steve Miller, Project Engineering Consultants; Bob Mooreman; Bonnie Mooreman; Ted Northrop, Huitt-Zollars, Inc.; Bryan Patterson, City of Chandler; Rich Perry, Dibble & Assoc.; Chris Plumb, MCDOT; Dale Richards, Earth Tech; Lynn Robinson; Eugenia F. Sucha; Ron Taylor, City of Mesa; Elaine Wilcox; Roger Wilcox; Jerry Zovne, HDR Engineering.

1) Approval of the Minutes of the January 26, 2000 FCAB Meeting.

MR. CHERRINGTON MADE A MOTION TO APPROVE THE MINUTES AS SUBMITTED. MS. LONG SECONDED THE MOTION AND IT CARRIED UNANIMOUSLY.

2) Intergovernmental Agreement (IGA) FCD 1999A026 between the Flood Control District, the Town of Paradise Valley and the City of Phoenix for the Doubletree Ranch Road Drainage Improvement Project.

Scott Vogel, Project Manager, presented this IGA among the District, Town of Paradise Valley and the City of Phoenix for cost sharing, utility relocations, rights-of-way acquisition, construction, construction management, and for operation and maintenance of the Doubletree Ranch Road Drainage Improvement Project.

This project came to the District in 1994 and was proposed by the Town of Paradise Valley after there was some serious flooding in the area in the fall of 1993. In 1996, a feasibility study was completed for the project, which identified a \$33 million price tag for a 100-year solution. Because this project was considered to be cost prohibitive, the District and the Town decided to look at a 10-year solution. In 1997, the District and the Town entered an agreement to cost share in the design of that solution. Part of the project extends into the City of Phoenix and they have provided general support for the project. Resolutions are in place, authorizing the feasibility study, negotiation of IGAs, the design, and rights-of-way acquisition for the project. The Town of Paradise Valley is cost sharing the design with the District at a 50-50% split, and the design of the project is at the 90% plan level. Just last year, the Town and the District signed an MOU indicating the intent to go ahead with an IGA for completion of construction and operation & maintenance. In addition to the drainage improvements that we are proposing for this project, the Town of Paradise Valley has indicated that they would like to construct street improvements to Doubletree Ranch Road along with the drainage improvements.

The cost of the drainage project is estimated to be \$11.4 million, and the District and the Town of Paradise Valley will share this cost. That cost share is broken down 70% for the District and 30% for Paradise Valley. The additional street improvements will be funded totally by Paradise Valley.

Staff recommends that the Advisory Board approve and recommend to the Board of Directors to approve this IGA with the Town of Paradise Valley and the City of Phoenix for the Doubletree Ranch Road Project with the changes noted with the modification to operation and maintenance provisions.

## Discussion:

Patel: Have all rights-of-way already been acquired?

*Vogel:* Generally what we do is get a Resolution to design and acquire rights-of-way for a project. Typically we refrain from doing those activities until we enter an IGA to cost-share for those portions.

Patel: What have we spent, to date, as far as the District is concerned?

Vogel: 50% of the design costs.

*Cherrington:* Can you show us on the aerial photograph where the flooding in 1993 occurred and how significant was it?

*Vogel:* In general, the storm flows come off the Phoenix mountains down towards Doubletree Ranch Road, occasionally flooding homes on either side. Flood flows that come through culverts in Tatum Boulevard find their way through some existing washes and small drainage paths that people have made through their back yards.

*Cherrington:* Why was there not a lot of landscape flooding next to places where homes were actually flooded?

*Vogel:* Basically we conducted a resident survey to help determine the extent of the flooding in the area. Not all of surveys are returned to us. What we get is a cross-section of people who are interested in responding.

*Cherrington:* Phoenix's interest is drainage off the Phoenix Mountain Preserve?

*Vogel:* Phoenix is generally outside of the project area. The benefit that Phoenix would see from the project would be reduced flows that cross Tatum Boulevard, which is owned by the City of Phoenix.

*Cherrington:* Paradise Valley is willing to operate and maintain that storm drainage system along the west side of Tatum?

*Vogel:* In our MOU with Paradise Valley, they stated that they intent to take over the operation and maintenance for the entire system.

*Patel:* Will the flooding problem be solved for all those homes shown in your earlier exhibit if the 100-year solution is not pursued?

*Vogel:* Not all the homes within that exhibit. We have a general area of benefit as identified in the last page of your IGA.

*Patel:* So all the homes in that area should not experience further flooding?

*Vogel:* The backbone system that we are putting in benefits the homes in that area. There may be local drainage ditches through various yards to get flow to our storm drain system.

Patel: Does this benefit area actually remove homes from a floodplain?

Vogel: There is no delineated floodplain.

Long: With the 10-year plan in place, what do you anticipate with a 100-year flood?

*Vogel:* We anticipate that the storm drain system will be able to handle a significant part of that 100-year flood. Part of it would go underground; the rest of the storm water would need to be conveyed across the surface of the ground. In addition to the 10-year storm drain, we are lowering Doubletree Ranch Road, so flows that got to Doubletree Ranch Road would be easier conveyed towards Indian Bend Wash. This is not a 100-year solution.

*Long:* Would there be some damage to your 10-year solution? Damage to anything that would be in place for the \$11 million price tag?

*Vogel:* The system in general is a series of underground storm drains and catch basin-type inlets. I can't think of any damage that would occur to a system like that due to a 100-year storm.

Cherrington: Was there an effort at one time to clean out Cherokee Wash and did that take place?

*Vogel:* There was an investigation done at one time to clean out Cherokee Wash and try to determine the benefit of that. What we found was that it would benefit the area along Cherokee Wash, but would not provide benefit for the rest of the area.

*Martin*: Does the water run down 52<sup>nd</sup> Street to Cherokee Wash?

*Vogel:* Currently, flow makes its way through a wash between homes and discharges onto Doubletree Ranch Road where we have some existing swales on either side of the road that would carry the flow down. Those swales, along either side of Doubletree Ranch Road, are estimated to be a two-year level of protection.

Mr. Patel opened up the meeting for comments from the public. He asked that questions or comments be kept to a minimum of three minutes.

Liz Clendenin, Paradise Valley resident: Ms. Clendenin went into the history of the Doubletree Road Drainage problems. In 1992, Cherokee Wash overflowed because it was overgrown and filled with debris. The Indian Bend Wash overflows across Doubletree Road. In 1995, the District sent out a questionnaire (Ms. Clendenin submitted a copy of the questionnaire, the Flood Control District's tabulation of the questionnaire, and an analysis of the tabulation by the Concerned Residents for the Preservation of the Town (CRPT) to the Board members.) Ms. Clendenin asked the Board to be aware that the original reason for this project is no longer part of the project, the list of thirty-two responses is flawed data; the Indian Bend Wash will still flood over Doubletree; the mountain preserve chute does not have a 10-year event, and that the area is not in a floodplain. Roger Wilcox, Paradise Valley resident: Mr. Wilcox felt that all we need to do is to clean out Indian Bend Wash and that would take care of everything. To spend a huge sum of money seems to be very questionable and not make much sense.

Patel: Just for clarity, are you for or against this project?

Wilcox: I'm very much against it.

Eugenia Sucher, Paradise Valley resident: Ms. Sucher was concerned about the elevation of Doubletree Ranch Road and if the change in elevation from the original plans had been taken into consideration. She mentioned that her home was flooded, but no one asked her why. She had flooding because there was a storm one day and a lot of water was dumped in her back yard into a

wash that had been incorporated as part of her landscaping by the builder. The wash emptied into her pool, which flowed into a lower level of her house.

Sucher: Was a Candidate Assessment Report (CAR) was ever done on the Doubletree Ranch Project.

Vogel: Those aren't done on all of our projects.

Sucher: Why wouldn't it have been done on our project?

*Ellegood:* The CAR program is a new program that we started about two years ago. The purpose of the CAR program was to help our client cities to better define a project so that it could qualify for our CIP. The Town of Paradise Valley introduced this project before we were using the CAR program and was put into the Prioritization before that report.

*Patel:* In the interest of keeping our meeting moving, again I would like to limit you to three minutes. If you have a whole lot of questions, let's make a note of it and the Board will take that into consideration.

Sucher: Okay, I can just hand you a bunch of questions. I'm also going to hand you the sheet that shows that the Cherokee Wash was cleaned up in 1996. (Ms. Sucher gave the Board members a list of seven questions and a copy of a news article from the Town of Paradise Valley Independent.) George G.B. Dopp, Paradise Valley resident: Mr. Dopp was concerned that the Scottsdale School District hadn't been contacted in over two years and that, in concept only, they were in favor of some sort of flood control, mostly directed at Cherokee Wash. He feels that this project is totally unnecessary. Mr. Dopp said that the washes could be maintained a little bit better and that the road could be redesigned a little better. He also mentioned that the sewer lines were not considered in this project. Mr. Dopp was also concerned that the Homeowners Association on the west side of Tatum had not been notified about this project. Mr. Dopp hopes that the Board will turn down this project.

*Orland Freeman, Paradise Valley resident:* Mr. Freeman expressed his concern with the water that flows over the Cherokee Crossing. He is confident that sooner or later there will be a fatality there. Mr. Freeman is concerned for the safety of the school children.

Patel: Could you state your position on the project, are you for or against it?

*Freeman:* I'm for Liz. I'm against the project. Your problem isn't Doubletree. Your problem is Cherokee Wash.

*Dr. Charles Blackwell, Paradise Valley resident:* Dr. Blackwell mentioned that about five or six years ago in October, he went out with a yardstick and measured the water on the yellow line at the center of the road. It measured 18 3/8 inches. He also mentioned that the wash in front of his house hasn't been cleaned out – it's almost flat. Dr. Blackwell feels that if we can't control the most simple and expedient maintenance problems, how can these culverts be kept clean. He's against this project, but if it were toned down to something realistic, it would be fine.

*Cherrington:* Is there any way to determine or estimate the reduction in flooding that would occur because of the 10-year storm that you are protecting against? Can you say that these homes will be removed from flooding?

Vogel: What will happen with our backbone system is that we will put in a series of storm drain laterals. Those will collect the 10-year flows along the storm drain itself. I'm not going to promise that every home in the area is going to be protected from the 10-year system. We do a backbone system that picks up flows of concentration. We've been working with the Town of Paradise Valley to review this project. We have had citizen input on the project. We had approximately 10-12 public meetings, Town Council workshops, Town Council meetings, or other special meetings on this project. My impression is that initially the people in the meetings had been about 90% against the project, and slowly some of the citizens in Paradise Valley that realize benefit from this project and strongly want this project, have come along and we're at about a 50-50% mix now for and against. The way District staff has been looking at this process is that the Town of Paradise Valley has the responsibility to determine citizen concerns, if they are going to support the project

or not. The District approved the project through the prioritization process in 1994. Since then we have been keeping an eye on the project to make sure that it's doing appropriate things and that it's effective in what it's doing and in a cost-effective manner. We have looked to the Town of Paradise Valley to determine if they want to, based on the input from the citizens, continue with this process. To date, they've wanted to continue this far. They have reviewed our draft IGA and I believe, pending approval from the Advisory Board, they would go on to a review approval of the draft IGA.

*Martin:* In your meetings, did the lack of a bridge come up at 56<sup>th</sup> Street and Cherokee Wash? *Vogel:* Yes. One of the features of this project includes a crossing at the 56<sup>th</sup> Street Wash. It's a dip crossing now. What we are proposing to put in is a four-cell box culvert. The downstream portion of Cherokee Wash is under-sized to pass the 10-year storm event. In order to make the entire system not be adversely impacted from that 10-year storm event, we are taking one of the cells of this box culvert and diverting it into the storm drain down 56<sup>th</sup> Street which will go into the Doubletree Ranch Road Storm Drain and down to the Indian Bend Wash. Bottom line, that crossing would be a 10-year level of protection type crossing.

Bill Mead, Town Engineer: The genesis of this did not start in 1992, it actually started in October of 1993 when we had a rather severe rain. I was involved in that storm and I went out and talked with many of the residents. At that time, I had nothing to tell the people in terms of what we could do to resolve the storm drainage issues. I went to the Town Council and they wanted to see how many people were impacted. We hired the firm of Hook Engineering to do a study for us to help us determine how many people were adversely impacted; how many people would like to see a drainage system put in on the Doubletree area. It was Hook Engineering that actually did the survey, it wasn't the Flood Control District. The Flood Control District was nice enough to take the results of that and compile it together and produce it. Drainage off of the Phoenix Mountain Preserve is what really causes the problem. All the water that comes off there goes into Paradise Valley. If you walk up the Preserve, what you are going to find are rather large concrete channels that were built by Doubletree Canyon that intercepts a lot of the water from off the mountain and outfalls it right into Paradise Valley. That is the source of our problems.

Patel: It sheet flows across Tatum?

Mead: Yes. In fact, I know of one time when Tatum was actually closed by the police because the water there was so deep and people going too fast didn't realize there was an issue there with the depth of the water. In 1995, the Town of Paradise Valley went to the City of Phoenix. At that time, the Council asked the City of Phoenix to participate with us in correcting this problem. Financially, they would not be able to participate. The Town of Paradise Valley did pursue this by trying to get some retention and/or detention basins in the Preserve. We were again told that would not be feasible. In about 1985, when this development was going through, a lot of the residents in Paradise Valley had indicated that if they take this water and concentrate it into one outfall, we are going to have some severe drainage problems. Paradise Valley wanted to talk with Phoenix and let them know what our issues were. The result of that was that the City of Phoenix hired Water Resources Associates, a hydrology firm. They offered to pay for ½ the study along with the Town of Paradise Valley. That study was performed and it showed that there was a lot of water that comes down Doubletree. The recommendation was a trapezoidal channel that would be constructed going down Doubletree. It was something like a 40-foot top width with about a 20-foot bottom width, a rather sizeable channel. Obviously something like that is not palpable to Paradise Valley. It never got built – who was going to pay for that was an issue that never got resolved. There was talk about the Cherokee Wash. Yes, we do have trouble with the Cherokee Wash. Over the years it has overgrown with a lot of vegetation, people have encroached into it. We did a study when Jack Hook was on the Board with the Flood Control District, and we looked at cleaning that up. We looked at rock-lining it, concrete-lining it, or leaving it natural but wider. Bottom line was it was not cost-effective. Also, the residents did not want to see us go in there and do something that massive. They preferred to keep it natural the way it was. When we got further involved and

we had the Flood Control District's engineers and our engineers do the study of Cherokee Wash, we determined that the most cost-effective solution was to actually intercept a portion of the water that flows into Cherokee Wash and divert it towards Doubletree. That was the most cost-effective. What it does is takes about 25% of the water out of Cherokee and puts it into the Doubletree Drainage System. Without that, Cherokee cannot contain the water within its boundaries. Cherokee overflows, all that overland flow travels through the houses and eventually makes its way to Doubletree. It's not really an acceptable situation that we have today, but we are working on that with the Flood Control District. Somebody indicated earlier that the School Board doesn't know what is going on. I have a letter from the Superintendent of the School Board that was given to the Town about three years ago, fully supporting this project. The Cherokee School has had their problems. In 1993 when we had a hard rain, you could not get to or from the school. The Homeowners Association on the west side of Tatum has come to a couple of our public meetings that we had at Cherokee School. I personally talked to one of the individuals on the Board, and they knew that we had some issues with the drainage that comes through their section. Our Council has met numerous times with the residents of this area. We've had about 14-15 public meetings on Doubletree, and that's with this current Council who has only been on board less than two years. Prior to that time we had many more meetings with the residents and prior councils. We got to this point because our Mayor and council feels there are enough problems and issues out here that we need to proceed with this project. On behalf of the Town of Paradise Valley, I urge you to approve the IGA that is before you.

*Patel:* It appears that a lot of the material that is being raised in opposition to this project has been presented before. From a technical standpoint, have you folks looked at positions and grades and concerns on the support of the project?

Vogel: Yes.

Patel: So there is technical merit to the project and it does provide benefit?

Vogel: Certainly it does.

*Cherrington:* Typically in a floodplain, you can identify how many people get removed from the floodplain. Can you quantify what the benefit is?

*Vogel:* There is not a 100-year floodplain delineated in this area. I believe the Flood Control District does many projects within areas where there is no 100-year floodplain. In the past we have looked at the benefit of this project and tried to project based on some federal FEMA numbers, estimated number of homes, damage to those homes. As I recall, the numbers showed there could be significant damages out there.

Ellegood: We did a brief study as best we could. We used a state-of-the-art computer based modeling system and we showed that the potential inundation area of a 100-year flood was substantial. It is as accurate as we can do, but is not as accurate as it would need to be to say definitively to someone that this house will flood and the neighbors will not. I'm hesitant to bring it up. We do believe, based on our hydrology, that real potentials for flooding and significant property damage exists out there. If you look at an aerial photograph of Paradise Valley in the 1970's prior to development, and you look at a similar one post development, you will see that the development virtually obliterated all of the natural washes except the Cherokee Wash and the ones that clearly are here and preserved as washes. It was evident that there was substantial sheet flow across that area as these washes became flooded and overflowed their banks. When the development occurred, there was no substitute system put in place. Typically in Phoenix and other areas, there are underground sewer systems to take a certain percentage to flow. This is not the case in this particular area. Our hydrology indicates that a real danger exists. I will grant to all the residents that live there that it probably hasn't happened yet. That doesn't say it isn't going to happen, and our evidence suggests that it will. We certainly don't want to spend \$11 million of taxpayer money on a pork barrel. If it were, then I would submit that there are other projects throughout the valley where we could better spend that money. I do think professionally that this is worthwhile project and I respect the neighborhood and I'm delighted for their interest.

*Saager:* Mr. Mead, do you have any estimates of what it would cost to maintain and clear out the dirt in the wash?

*Mead:* There are cost estimates in the Hook study, and they were in the neighborhood of \$7-8 million.

*Martin:* They said the last time it was cleaned out it cost \$43,000, according to the document the CRPT gave us.

*Mead:* The Town hired a landscape contractor to go out and trim back some of the trees and bushes that were choking the wash.

*Saager:* Mr. Mead, you had three Superintendents with the Scottsdale School District, did you contact the two Superintendents – one that was just appointed and one that was just let go a year ago – did you contact either one of those two?

*Mead:* Mr. Sheldon was the one who wrote the original letter. We were in contact with Randy Blekka who was the principal of the school. There is another principal there now that I had a meeting with six months ago along with the Chief of Police to go over the drainage. My impression is that the school does know what is going on.

*Saager:* If it was Dr. Sheldon, that was four Superintendents ago. So the three Superintendents since Dr. Sheldon have not been contacted?

*Mead:* Not by me.

MR. MARTIN MADE A MOTION TO DENY STAFF RECOMMENDATION, BUT WOULD WELCOME A NEW PROJECT THAT WOULD PUT A BRIDGE IN AT  $56^{\text{TH}}$  STREET TO TAKE CARE OF THE SCHOOL. MS. LONG SECONDED THE MOTION AND IT CARRIED UNANIMOUSLY.

3) Intergovernmental Agreement (IGA) FCD 1999A027 between the Flood Control District, the Maricopa County Department of Transportation (MCDOT) and the City of Mesa (City) for the Elliot Road Detention Basins & Outfall Channel Project.

Scott Vogel, Project Manager, presented this IGA among the District, MCDOT and the City of Mesa for cost sharing, design, rights-of-way acquisition, construction, construction management, and for operation and maintenance of the Elliott Road Detention Basins and Outfall Channel from Crismon Road to Ellsworth Road.

The Elliot Basins Channel Project was identified as a high priority project in the East Mesa Area Drainage Master Plan. Some of the benefits we see from the project are that it reduces the existing street flooding in the area and it provides a backbone system for the area. This project is being done in cooperation with MCDOT and the City of Mesa projects.

We have Resolutions in place authorizing negotiation of IGAs for this project for the design and rights-of-way acquisition. IGA FCD98038 was entered with the City of Mesa last year and what this did was it identified a cost share for the design and rights-of-way for the project. That was a 50-50% cost share with the City of Mesa. During this design, we have been able to identify the level of benefits that MCDOT receives from this project. MCDOT has agreed to become a cost share partner, so what the IGA before you does is it reworks the overall cost share for the project to include MCDOT with Mesa and the District and the rescinds the old IGA that does not include MCDOT.

Because this project is the first phase of a larger project that will eventually continue down to the EMF, we've designed a feature to disperse the flows back into the existing washes so that we don't have any more flooding in the interim than we do today. Along Crismon Road we have a hatched channel, this is our Phase II portion of the project. The City of Mesa has agreed that they will

require the developers adjacent to the project to construct this feature as they develop. The IGA does allow the project partners to go ahead and build this feature of the project if development doesn't come along in a timely manner. The project also includes three detention basins. These basins work together to cut down the peak flow in these facilities coming in so that the downstream channels can be smaller. The City of Mesa has proposed to use these basins and some of the area surrounding it as a joint-use park. We are proposing that the portion of the Elliot facility along the GM rights-of-way are put within the GM rights-of-way; they have agreed to dedicate land for that. MCDOT also has a project in the area. Currently they are designing Ellsworth Road from about Guadalupe Road down to Germann Road. We are working this project in conjunction with their project.

The draft IGA outlines the project responsibilities in that the Flood Control District will acquire the channel rights-of-way, be the lead for the design, public involvement, construction, and construction management. MCDOT will review the design plans and provide their permits and rights-of-way. The City of Mesa will also review the plans and provide their permits and rights-of-way. The City of Mesa will ultimately take over the project for operation and maintenance. The estimated project cost is \$8 million. The IGA splits that up 50% Flood Control District, 15% MCDOT, and 35% for the City of Mesa.

Staff recommends that the FCAB approve and recommend to the Board of Directors to approve this IGA with MCDOT and the City of Mesa. Upon approval of the IGA, IGA FCD 98038 would be rescinded.

# Discussion:

*Martin:* How much difference is in this IGA than the other IGA, other than the cost sharing? *Vogel:* There is virtually no difference. The other IGA just included the design and rights-of-way and we've included with a bigger piece – we've added on the construction and construction management. Basically everything that was in the original IGA is in this new one.

MR. MARTIN MADE A MOTION TO APPROVE STAFF RECOMMENDATION. MR. CHERRINGTON SECONDED THE MOTION AND IT CARRIED UNANIMOUSLY (EXCEPT MR. SAAGER WHO STEPPED OUT OF THE ROOM BEFORE THE MOTION WAS MADE).

4) Intergovernmental Agreement (IGA) FCD 2000A001 between the Flood Control District and the Town of Wickenburg for the Wickenburg Wash "Q" Drainage Project.

Bobbie Ohler, Project Manger, presented this IGA with the District and the Town of Wickenburg for cost sharing, permit acquisition, design, construction, construction management, and operation and maintenance of the Wickenburg Wash "Q" Drainage Project.

This project has been recommended for inclusion in the District's CIP Prioritization Procedure and approved by this Board on December 6, 1999. The Resolution to draft the IGA and to fund the project was approved by this Board on January 26, 2000 and will go to the Board of Directors on March 1<sup>st</sup>.

The IGA provides for a cost share of 60% for the District, 40% for the Town of Wickenburg with a project cost estimate of \$100,000. Our share will be capped at \$60,000. Wickenburg will take the lead for the design, rights-of-way acquisition, construction, construction management, and they will be fully responsible for operation and maintaining the project when it is completed.

When the Town constructed the plant, they used an SCS accepted method to determine the flows down Wash "Q" in order to site the plant above the 100-year flood. In 1992, the Flood Control District completed the Wickenburg Area Drainage Master Study, in which, one of the main purposes was to delineate the floodplain of the Hassayampa River. When we took a closer look at Wash "Q", we determined that the flood flows were much higher than what Wickenburg had originally thought they would be. Our methods were a lot more technically acceptable today. If the 100-year flood were to come down the Wash now, the existing culverts would not be able to pass peak flows and the Treatment Plant would be inundated and raw sewage would flow down into the Hassayampa River.

The project will provide protection from the 100-year flood, prevent damage to the Wastewater Treatment Plant, enable Wickenburg to obtain their Aquifer Protection Permit, and prevent contamination to the Hassayampa River and Hassayampa River Preserve.

Staff recommends that the Advisory Board approve and recommend to the Board of Directors to approve this IGA with the Town of Wickenburg to implement the Wickenburg Wash "Q" Drainage Project.

MR. CHERRINGTON MADE A MOTION TO APPROVE STAFF RECOMMENDATION. MR. MATTHEWS SECONDED THE MOTION AND IT CARRIED UNANIMOUSLY (EXCEPT MR. SAAGER WHO STEPPED OUT OF THE ROOM PRIOR TO THIS PRESENTATION).

5) Intergovernmental Agreement (IGA) FCD 2000A005 between the Flood Control District and the City of Chandler for the Downtown Chandler Drainage System Project.

Afshin Ahouraiyan, Project Manager, presented this IGA with the City of Chandler that will allow for cost sharing between the District and the City of Chandler for rights-of-way acquisition, design, construction and construction management for the Downtown Chandler Drainage System Project.

The downtown Chandler area was developed prior to current drainage standards being in place. Since then, the City has developed a drainage master plan and updated it in 1998. The current plan shows modifications to some of the existing facilities they have within the downtown Chandler area. Upon modifications to this system, it will be able to provide 100-year protection for that entire area. Since the City of Chandler does not have a regional outfall, it will also provide a system that can take the flows from the City's downtown area to two regional outfall basins.

The City of Chandler requested this project for the FY 2000/2001 CIP Prioritization Procedure. The Board of Directors approved the Resolution on January 19, 2000 giving us permission to draft an IGA with the City and to include funds in our CIP for this project. The total cost of the project is \$12.2 million and the District's share is 50%, which is capped at \$6.1 million.

Staff recommends that the FCAB approve and recommend that the Board of Directors approve this IGA with the City of Chandler for the Downtown Chandler Drainage System.

## Discussion:

*Patel:* When we are involved in a facility like this that has a mechanical component where things can happen down the road in terms of operation and maintenance, how are we as the District protected through the IGA?

*Ahouraiyan:* Part of the IGA is that the District is going to participate in an annual inspection of the facility and, if that if there is any maintenance issues, the City has 30 days to correct the concerns that the District raises.

*Patel:* Do we as a District have standards as far as the pump facilities are concerned that the City will be required to do in terms of equipment and factors of safety, etc.

Ahouraiyan: I believe we do.

*Martin:* Why would the water not flow to the west naturally? Is the elevation too much difference between the two basins?

Gary LaForge, Chandler Public Works Department: We analyzed three different alternatives for that, including a gravity system. In this area of Chandler, the fall is about a foot to a foot and a half per mile. Where it does fall a little bit to the west, it is not enough to allow us to put in a small enough pipe to not affect so many utility crossings and everything else we have to do. The cost to construct the larger diameter pipe was about twice the cost of the forcemain. It was determined that because of the cost it was much better for us to put in the 36-inch force main.

*Martin:* If you are going to do that, are you going to have a backup pump system?

*LaForge:* Our standard is always to include one additional pump. We are also placing a backup generator for the facility.

*Martin:* Does the Arrowhead Basin outfall to the ADOT holding area?

*LaForge:* That basin currently does not have an outfall, but it is part of the Price Freeway construction, but there will be an outfall.

# MR. MARTIN MADE A MOTION TO APPROVE STAFF RECOMMENDATION. MS. LONG SECONDED THE MOTION AND IT CARRIED UNANIMOUSLY.

6) Proposed FY 00/01 Capital Improvement Program Budget & Five Year CIP.

Dick Perreault, CIP/Policy Branch Manager, presented this item for information and discussion only. The Five-year CIP was submitted two weeks ago to the Office of Management and Budget, a copy of the spreadsheet was included in your packet.

Eight major construction projects will be completed this year, amounting to approximately \$29 million. Eleven major construction projects were initiated in FY 99/00, totaling approximately \$18.5 million. Funding for the FY 00/01 Proposed CIP amounts to approximately \$68.3 million. Eight major construction projects will be initiated in FY 00/01, representing a total cost of approximately \$45 million. The Five-year CIP includes more 50 individual projects; includes initiating or completing eleven Area Drainage Master Studies; working in 18 municipalities and unincorporated Maricopa County. The Five-year total is approximately \$300 million, which includes the Dam Safety Assessment Studies and Candidate Assessment Reports.

7) South Phoenix/Laveen area update. This item was for information and discussion only. No action was required.

Julie Lemmon mentioned the notice received in the FCAB packet, Notice of Public Meeting in Violation of (the) Open Meeting Law. There was a meeting called by the Salt River Project and during the meeting, Julie realized that four Advisory Board members had shown up to participate in this meeting, which by Arizona law means there was a quorum. Because Flood Control business was discussed, this was an open meeting that had not been noticed. This notice was published; no action was taken, so there is no action that needs to be ratified. There was a presentation given by Tim Phillips and also Mike Ellegood spoke about some issues in the Laveen area and what the Flood Control District is trying to do with the property owners. Anyone who was not present to hear what was said, Mike or Julie would be happy to tell you exactly what went on at the meeting and make this part of another meeting, if the Board members would like. There will not be minutes of that meeting. In the future, if there are four Advisory Board members present at a Flood Control District function, please notify Julie or Kathy Smith, Clerk of the FCAB.

Mike mentioned the tremendous amount of growth pressure in the South Phoenix Laveen area. MCDOT has a major project funded and is anticipated to go to construction in mid-August, which will widen Baseline Road. In order to widen Baseline Road, MCDOT must relocate a ditch in which SRP conveys tail water and also uses it to deliver water to the Gila River Indian Community. And, there's a tremendous amount of development pressure. With all these factors, it seems that it would be in everyone's best interest to install a drainage system which will remove a flood hazard, which we know to exist in the South Phoenix Laveen area, and possibly also convey SRP's water and perhaps also to incorporate that as part of a trail system. In order to make this work, a number of factors and a whole bunch of different interests will have to come together at the same time. MCDOT is under a tremendous deadline in order to meet their CIP. They've got \$34 million worth of funding that will be jeopardized or will need to be reprogrammed if this doesn't come to pass. The development community will be potentially delayed without this system. If the system cannot be put into place, we may have to delineate flood hazard area out there, which no one wants to do. We have an opportunity to work collaboratively with SRP, MCDOT, City of Phoenix, and the private interests to put a drainage system in place. Perhaps even have it done as development occurs, partially at developer expense, and partially with some MCDOT dollars since they would not have to relocate the SRP drain. When we have something more definitive, we will bring that back for the Board's approval. We've not identified any specific project at this point, nor any costs associated with it.

8) Comments from the Chief Engineer and General Manager. This item was for information only. No action was required.

Mike talked about the Skunk Creek Project Levee System and the County Trails Program, which included the West Valley, EMF and Rio Salado.

9) Summary of Recent Actions by the Board of Directors. This item was for information and discussion only. No action was required.

The Board of Directors, in a recent meeting, denied the construction of the El Mirage Project; a project that you approved a month or so ago to construct a drain affecting both the Town of Surprise and El Mirage and discharge it into the Agua Fria River. The project was denied, not because it wasn't a worthwhile Flood Control project, but because of the development that is occurring in the Town of El Mirage that may have an impact on Luke Air Force Base.

10) Other Business and Comments from the Public. This item was for information and discussion only. No action was required.

Shirley Long	Kathy Smith
MILLEY LONG	

The meeting adjourned at 4:15 p.m. by general consent.